

Clinical Laboratory Update

Sexually Transmitted Infections

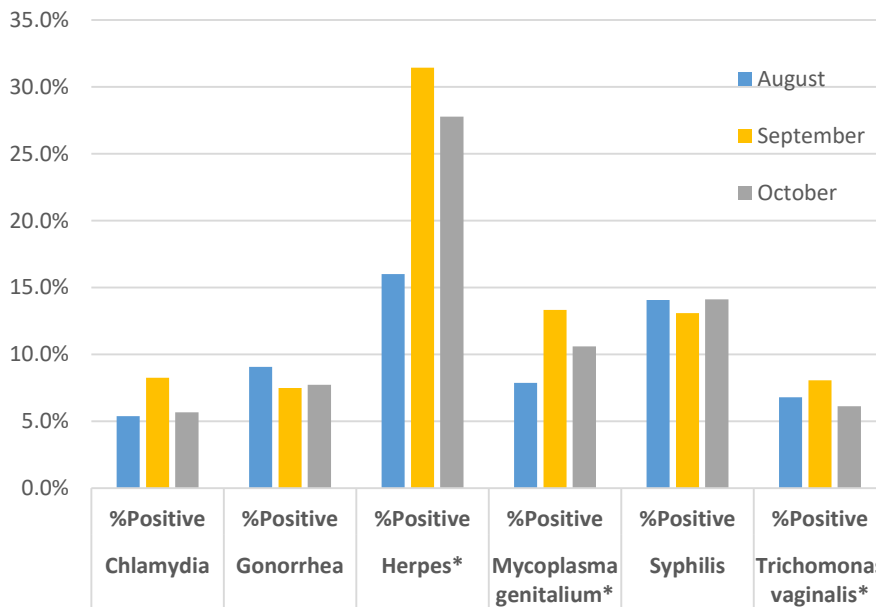


Figure 1: Percent positivity for specimens screened using molecular or serological assays for the given organism.

*Not reportable as per WI DHS 145.04 (3) (a)

Syphilis Surveillance

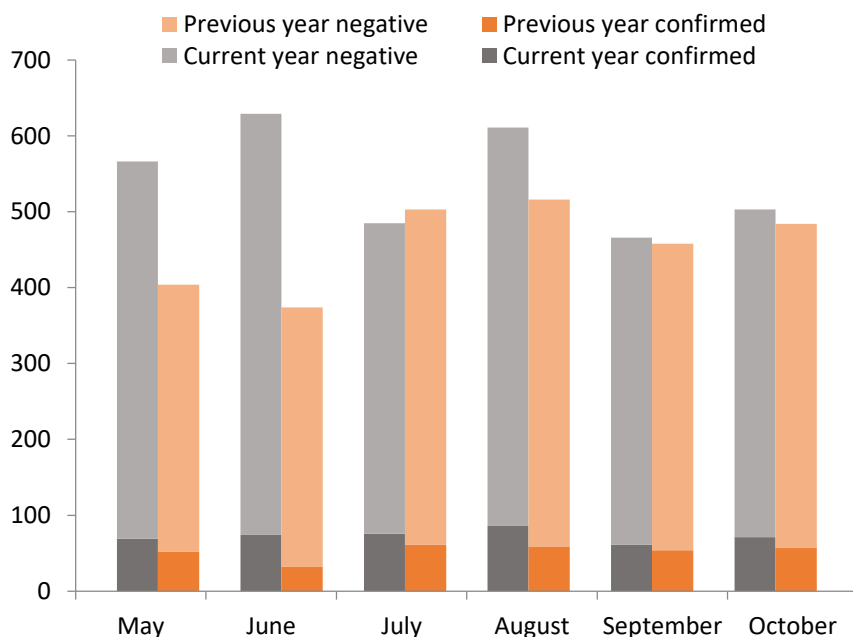


Figure 2: Monthly comparison of syphilis data with year over year comparisons.

Number of specimens screened at MHD, darker bars represent confirmed tests.

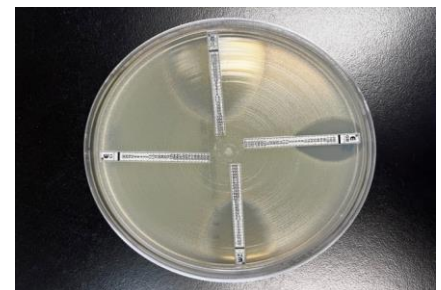
MHD Laboratory Highlights

GC AST Resources at the City of Milwaukee Health Department Laboratory

Recent federal funding to the City of Milwaukee Health Department Laboratory has provided the means to expand fee-exempt Cephalosporin Antibiotic Susceptibility Testing (AST) for *Neisseria gonorrhoeae* (GC) statewide. Surveillance for Suspect Treatment Failure (STF) and Disseminated Gonococcal Infection (DGI) has also been expanded. Please submit all eligible isolates directly to the City of Milwaukee Health Department Laboratory (MHD).

MHD is a SURRG-Center of Excellence Reference Laboratory (Strengthening U.S. Response to Resistant Gonorrhea) for AST of GC isolates and participates in CDC's Gonococcal Isolate Surveillance Project (GISP) using the Etest method to rapidly identify patients with cephalosporin antibiotic resistant GC. In the past 4 years, 16% of isolates tested in Milwaukee had reduced susceptibility (RS). Of those, 98.9% (440) had RS to Azithromycin, 3 isolates had RS to Ceftriaxone and 2 isolates had RS to Cefixime. Recent increasing trends of DGI have been reported across the country, with 29 cases of culture confirmed DGI reported in Wisconsin (CY 2019-2021).

Eligible testing will be at no cost and will not be billed back to the requesting laboratory, clinical provider, or patient. For culture collection supplies, transport, or testing questions contact MHD either at 414-286-3526 or MHDLab@milwaukee.gov.



Links to related information & data:

[MHD COVID-19 Situation](#)

[WSLH Laboratory Surveillance Report](#)

WI SARS-CoV-2 Genomic Dashboard:

<https://dataportal.slh.wisc.edu/>

CDC COVID-19 Data Tracker:

<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

New HIV Infections

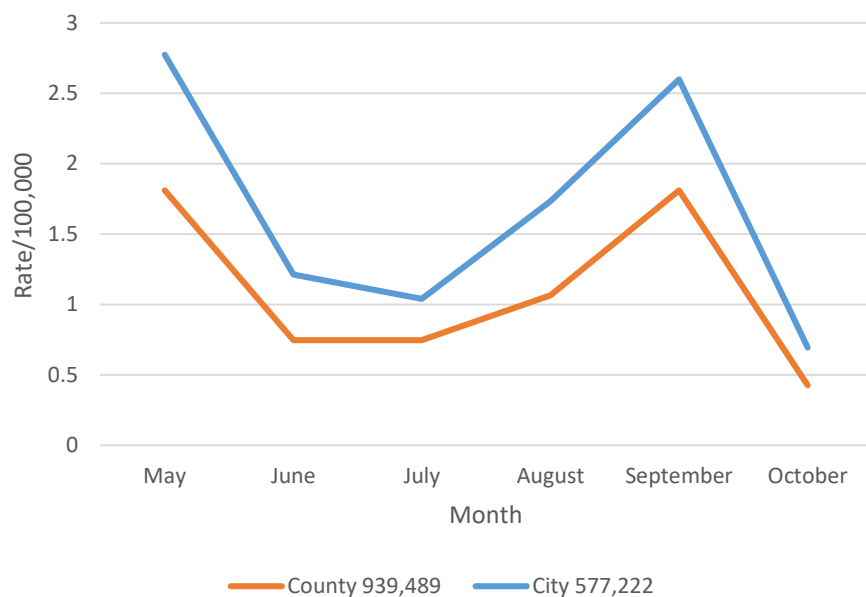


Figure 3: Monthly comparison of rate of new HIV infections in Milwaukee County and the City of Milwaukee, using data obtained from the Wisconsin Department of Health Services. Numbers are provisional and subject to change. Population figures taken from 2020 census results.

For statewide HIV data, visit:

<https://www.dhs.wisconsin.gov/hiv/data.htm>

Sexually Transmitted Infections by Source

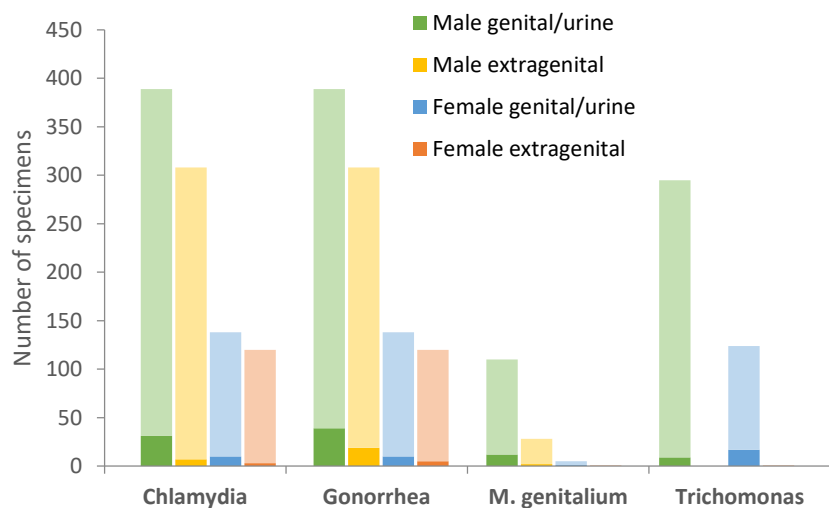


Figure 4: Distribution of STIs detected using NAAT. In October 2022, 5.5% of male and 5.0% of female specimens screened were positive for Chlamydia. 8.3% of male and 5.8% of female specimens were positive for Gonorrhea. 10.1% of male and 1 of the 6 female specimens were positive for *M. genitalium*. 3.1% of male specimens and 13.6% of female specimens were positive for *Trichomonas*.

Note: Darker bars indicate positive specimens.

Gonorrhea Antimicrobial Susceptibility Testing

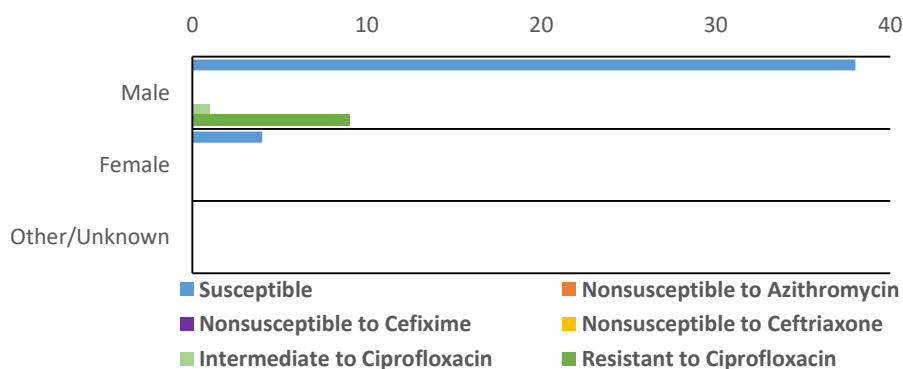
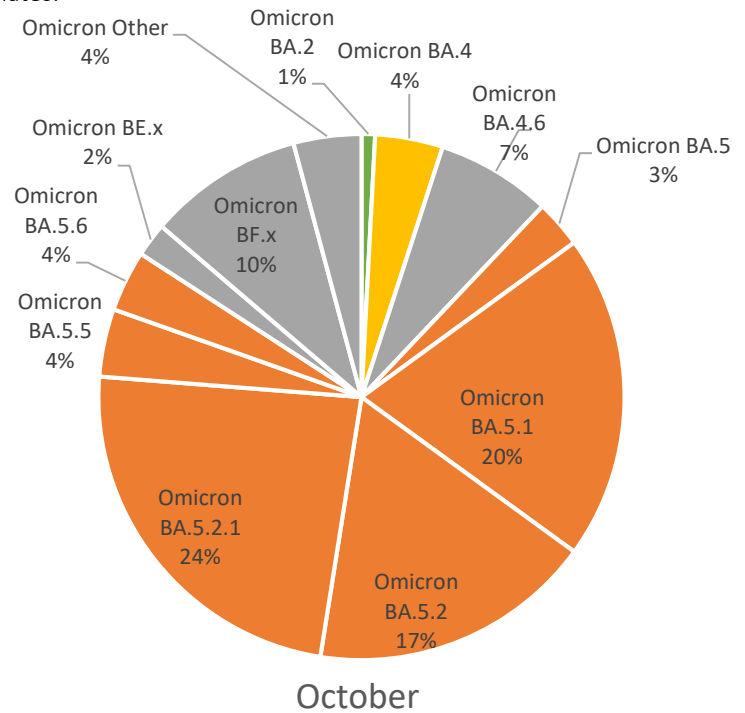
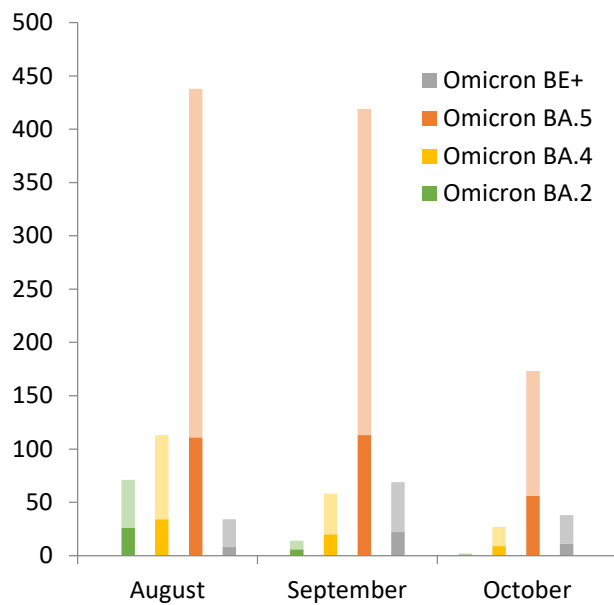


Figure 5: Antibiotic susceptibility profile of Gonorrhea isolates identified in males and females. In October 2022, 10 of 52 cultures tested were found to be intermediate or resistant to Ciprofloxacin according to CLSI guidelines. MHDL tests for antibiotic resistance to Ceftriaxone, Cefixime and Ciprofloxacin.

SARS-Cov-2 Sequencing Surveillance

Figure 6: Whole genome sequencing of SARS-CoV-2 surveillance isolates.
Below: monthly totals. Right: Current month variant report.



Viral Surveillance

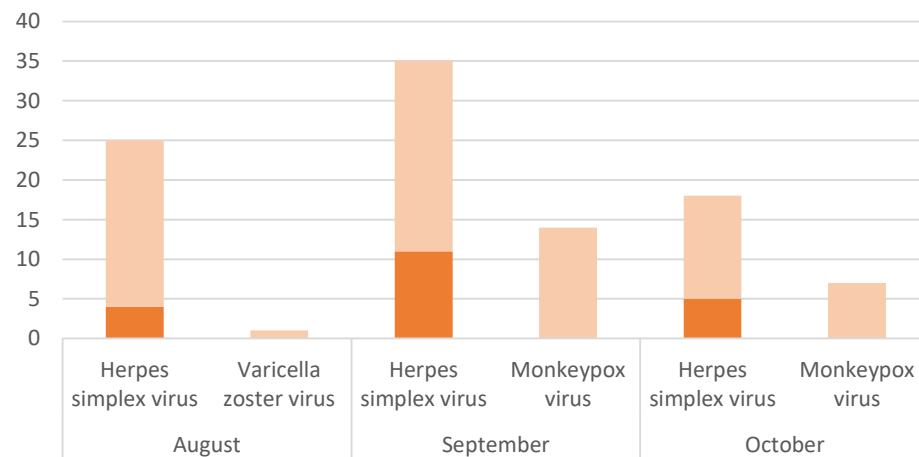


Figure 7: Specimens tested using molecular methods.

Note: Height of bar indicates number of specimens tested.

Darker bars indicate DNA/RNA detected by virus culture, real-time PCR and/or nucleotide sequencing analysis.

Respiratory Infections

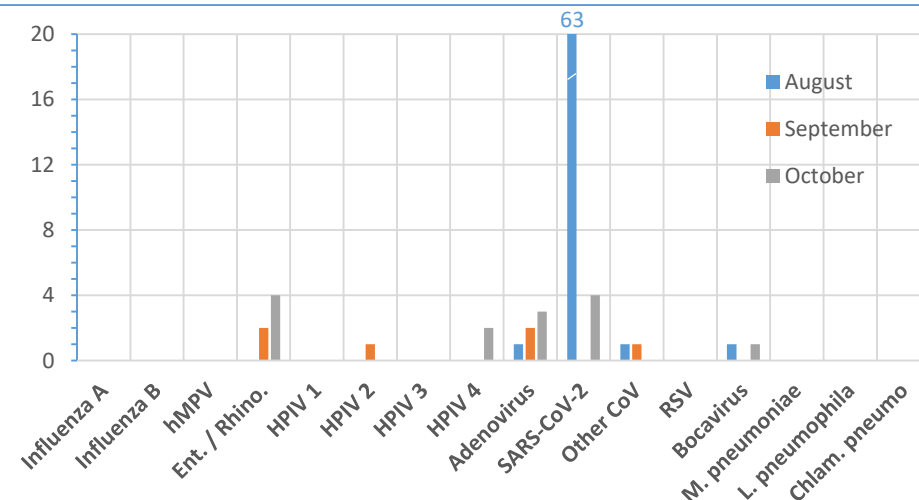


Figure 8: Respiratory pathogens detected using a Respiratory Pathogen Panel (RPP) and/or RT-PCR Influenza and Covid-19 assays.